## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. - 56. (Canceled)

57. (Currently Amended) An oxazaphospholane compound of formula (1):

wherein

R<sup>1</sup> represents a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally comprising an aliphatic ring,

R<sup>2</sup> represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety which is a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally comprising an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents comprising a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur,

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), t-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc) , t-butyl carbamate (t-boc), and Si(R<sup>5</sup>)<sub>3</sub>, R<sup>5</sup> being the same or different within the  $\underline{\text{Si}(R^5)_3}$ ,  $\underline{\text{Si}(R_5)_3}$ , the protecting group being a C<sub>1</sub>-C<sub>6</sub> branched or straight alkyl group, or an aryl group, and

X represents a chemical moiety that is replaced under nucleophilic attack in the presence of a nucleophilic reagent <u>and is selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethyxophosphite, and [(isopropyl)2N]2POCH2CH2CN,</u>

wherein X is optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether and a sugar moiety,

wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

58. (Cancelled)

- 59. (Previously presented) The oxazaphospholane compound of claim 57, wherein R<sup>1</sup> represents a C<sub>8</sub>-C<sub>24</sub> aliphatic moiety.
- 60. (Previously Presented) The oxazaphospholane compound of claim 57, wherein  $R^2$  represents a hydrogen atom or a saturated or unsaturated  $C_8$ - $C_{24}$  aliphatic moiety.
- 61. (Previously presented) The oxazaphospholane compound of claim 60, wherein R<sup>2</sup> represents a hydrogen atom.
- 62. (Previously presented) The oxazaphospholane compound of claim 57, wherein X represents a halogen atom.
- 63. (Previously presented) The oxazaphospholane compound of claim 62, wherein X represents Cl.
- 64. (Previously Presented) The oxazaphospholane compound of claim 57, wherein Z represents a  $Si(R^5)_3$  group in which  $R^5$  may be the same or different in the same compound and represents a  $C_1$ - $C_6$  branched or straight alkyl group or an aryl group.
- 65. (Previously Presented) The oxazaphospholane compound of claim 57, wherein Z represents Si(Ph)<sub>2</sub>(t-Bu).

## 66. (Previously Presented) An oxazaphospholane compound of formula

$$X \longrightarrow P \longrightarrow NR^2$$
(1a): O

(1a) being the 2S,3R stereoisomer of the compound of claim 57, wherein  $R^1$ ,  $R^2$ , X and Z are as defined in the Claim 57.

67. (Previously presented) The oxazaphospholane compound of claim 57, wherein  $R^1$  is (*E*)-CH=CHC<sub>13</sub>H<sub>27</sub>,  $R^2$  is hydrogen, X is Cl and Z is Si(Ph)<sub>2</sub>(t-Bu).

68. (Previously Presented) The oxazaphospholane compound of claim 57, wherein  $R^1$  is (*E*)-CH=CHC<sub>13</sub>H<sub>27</sub>,  $R^2$  is hydrogen, and X is substituted with the group –O-CH<sub>2</sub>-CH<sub>2</sub>-N<sup>+</sup>(CH<sub>3</sub>)<sub>3</sub>.

69. (Previously Presented) The oxazaphospholane compound of claim 57, being the (E)-geometrical isomer of the compound of formula (1b):

$$CI \xrightarrow{\begin{array}{c} O\\ =\\ P\\ \end{array}} CH = CHC_{13}H_{27}$$

$$CI \xrightarrow{\begin{array}{c} O\\ =\\ \end{array}} CH = CHC_{13}H_{27}$$

$$(1b).$$

70. (Previously presented) The oxazaphospholane compound of claim 57, being an isolated stable compound.

71. (Previously Presented) A process for the manufacture of an oxazaphospholane compound of formula (1) as defined in claim 57, the process comprising

reacting a phosphorylating reagent selected from the group consisting of POW<sub>3</sub>, where W represents a halogen atom, an ethylene chlorophosphite, a methyl phosphodichloridite, a chloro-N,N-diisopropylaminomethyxophosphite and [(isopropyl)<sub>2</sub>N]<sub>2</sub>POCH<sub>2</sub>CH<sub>2</sub>CN with a 3-O-protected sphingoid compound of formula (2):

$$R^1$$
 (2)

wherein R<sup>1</sup>, Z and X are as defined in claim 57, and Y is an amine or an amino group.

72. (Previously Presented) The process of claim 71, further comprising reacting the phosphorylating reagent with a 2S, 3R stereoisomer of formula (2a):

HO 
$$R^1$$
 (2a).

73. (Previously Presented) The process of claim 71, wherein the phosphorylating reagent is reacted with the protected sphingoid compound in which Y represents NH<sub>2</sub>.

## 74. (Cancelled)

- 75. (Previously Presented) The process of claim 71, wherein the phosphorylating reagent is POCl<sub>3</sub>.
- 76. (Previously Presented) The process of claim 71, for the synthesis of the (*E*)-geometrical isomer of the compound of formula (1b):

## 77. (Currently Amended) An oxazaphospholane compound of formula (1):

wherein

R<sup>1</sup> represents a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally comprising an aliphatic ring,

R<sup>2</sup> represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety which is a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally comprising an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents comprising a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur,

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), t-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), t-butyl carbamate (t-boc), and  $\underline{Si(R^5)_3}$   $\underline{Si(R_5)_3}$ ,  $[[R_5]]$   $\underline{R}^5$  being the same or different within the  $\underline{Si(R^5)_3}$   $\underline{Si(R_5)_3}$  and a C1-C6 branched or straight alkyl group, or an aryl group, and

X represents a chemical moiety that is replaced under nucleophilic attack in the presence of a nucleophilic reagent, obtainable by the process of claim 71.

78-104. (Cancelled)

105. (Currently Amended) An oxazaphospholane compound of formula (1):

wherein

R<sup>1</sup> represents a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally containing an aliphatic ring;

R<sup>2</sup> represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety selected from a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally containing an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents containing a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur;

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), t-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), t-butyl carbamate (t-boc), and  $\underline{Si(R^5)_3}$   $\underline{Si(R_5)_3}$ , wherein  $R^5$  may be the same or different in the same moiety and is selected from a  $C_1$ - $C_6$  branched or straight alkyl group or an optionally substituted aryl group; and

X represents a leaving group selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethyxophosphite, and [(isopropyl)<sub>2</sub>N]<sub>2</sub>POCH<sub>2</sub>CH<sub>2</sub>CN, wherein X is

optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether, and a sugar moiety, wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated, and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

106. (Cancelled)

107. (Previously Presented) An oxazaphospholane compound of formula (1):

obtainable by the process of claim 71, wherein

R<sup>1</sup> represents a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally containing an aliphatic ring;

R<sup>2</sup> represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety selected from a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally containing an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents containing a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur;

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), *t*-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), t-butyl carbamate (t-boc), and Si(R<sup>5</sup>)<sub>3</sub>, wherein R<sup>5</sup> may be the same or different in the same moiety and is selected from a C<sub>1</sub>-C<sub>6</sub> branched or straight alkyl group or an optionally substituted aryl group; and

X represents a leaving group selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethyxophosphite, and [(isopropyl)<sub>2</sub>N]<sub>2</sub>POCH<sub>2</sub>CH<sub>2</sub>CN, wherein X is optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether, and a sugar moiety, wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated, and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

108. (Previously Presented) The oxazaphospholane compound according to claim 107, wherein  $R^1$  represents a  $C_8$ - $C_{24}$  aliphatic moiety; or Z represents a  $Si(R^5)_3$  group in which  $R^5$  may be the same or different in the same compound and represents a  $C_1$ - $C_6$  branched or straight alkyl group or an aryl group.

109. (Previously Presented) An oxazaphospholane compound of formula (1a):

$$\begin{array}{c}
OZ \\
\overline{\overline{z}} \\
X \longrightarrow P \longrightarrow NR^2 \\
0
\end{array}$$
(1a)

obtainable by the process of claim 71, wherein

R<sup>1</sup> represents a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety which may be a saturated or unsaturated, branched or linear chain, optionally containing an aliphatic ring;

R<sup>2</sup> represents a hydrogen atom or hydrophobic group, the hydrophobic group is a C<sub>1</sub>-C<sub>24</sub> aliphatic moiety selected from a saturated or unsaturated, branched or linear aliphatic chain, the aliphatic chain optionally containing an aliphatic ring, the aliphatic chain or ring optionally substituted with one or more substituents containing a heteroatom selected from the group consisting of oxygen, halogen, nitrogen and sulfur;

Z represents a protecting group selected from the group consisting of methoxymethyl (MOM), tetrahydropyranyl (THP), diphenylmethyl, triethylsilyl (TES), t-butyldimethylsilyl (TBDMS), mesitoate, 9-fluorenylmethyl carbonate (f-moc), t-butyl carbamate (t-boc), and  $Si(R^5)_3$ , wherein  $R^5$  may be the same or different in the same

moiety and is selected from a C<sub>1</sub>-C<sub>6</sub> branched or straight alkyl group or an optionally substituted aryl group; and

X represents a leaving group selected from the group consisting of a halogen atom, borate, ethylene chlorophosphite, methyl phosphodichloridite, chloro-N,N-diisopropylaminomethyxophosphite, and [(isopropyl)<sub>2</sub>N]<sub>2</sub>POCH<sub>2</sub>CH<sub>2</sub>CN, wherein X is optionally substituted with a group selected from the group consisting of an alcohol, an ether, a polyether, and a sugar moiety, wherein the alcohol contains an aliphatic moiety selected from the group consisting of an aliphatic chain, an amino aliphatic chain, a heteroatom comprising an aliphatic chain, an aliphatic chain comprising a cyclic ring which ring may be saturated or partially saturated, and an aryl group, the aliphatic chain may be a branched or straight, saturated or unsaturated chain.

110. (Previously presented) The oxazaphospholane compound according to claim 109, wherein

R1 represents a C8-C24 aliphatic moiety, or

Z represents a  $Si(R^5)_3$  group in which  $R^5$  may be the same or different in the same compound and represents a  $C_1$ - $C_6$  branched or straight alkyl group or an aryl group.

ROCHLIN et al. Application No. 10/568,056 Page 14 of 17

111. (Cancelled)